

Claims

- [c1] A brake assembly including a selectively movable member; and a controller assembly, which is coupled to said selectively movable member, which selects a certain amount of self-energization, and which moves said selectively movable member by a certain amount in order to cause said member to provide said certain selected amount of self-energization.
- [c2] The brake assembly of Claim 1 wherein said selectively movable member comprises a member which provides a variable angle of inclination.
- [c3] The brake assembly of Claim 2 wherein said angle of inclination varies in response to a variance in friction between a pair of selectively engaged members.
- [c4] The brake assembly of Claim 3 wherein said pair of selectively engaged members comprises a rotor; and a pad.
- [c5] The brake assembly of Claim 4 wherein said member comprises a wedge.
- [c6] The brake assembly of Claim 5 wherein said brake assembly further includes a pin about which said wedge selectively rotates and which is coupled to said rotor.
- [c7] The brake assembly of Claim 4 wherein said pad is biased against said rotor by a biasing spring.
- [c8] The brake assembly of Claim 4 further comprising a motor assembly which is coupled to said controller and to said selectively movable member.
- [c9] The brake assembly of Claim 8 wherein said brake assembly further comprises an intermediate gear portion and a screw actuator which is coupled to said motor assembly.
- [c10] A brake assembly comprising a rotor member; a pad member which may selectively engage said rotor member, thereby generating a certain amount of friction; a wedge member; and a controller which measures said certain amount of friction further and, in response to said measurement, rotates said wedge

member by a certain amount.

- [c11] The brake assembly of Claim 10 further comprising a motor which is coupled to said controller and to said pad member and which causes said pad member to selectively engage said rotor and said wedge member.
- [c12] The brake assembly of Claim 11 further includes a gear assembly which is coupled to said pad member and to said motor.
- [c13] The brake assembly of Claim 13 wherein said gear assembly comprises an intermediate gear portion and a screw actuator.
- [c14] The brake assembly of Claim 11 further includes a caliper which has a pocket portion which operatively receives said wedge member.
- [c15] The brake assembly of Claim 1 wherein said brake assembly further includes a biasing spring which is coupled to said pad member and which biases said pad member against said wedge member.
- [c16] A method for braking a vehicle comprising the steps of sensing a desired amount of braking; providing a certain actuation force; selecting a certain amount of self-energization; providing said certain amount of self-energization; using said provided actuation force and said certain amount of self-energization to brake said vehicle.
- [c17] The method of Claim 16 wherein said step of providing said certain amount of self-energization comprises the steps of providing a wedge member; and moving said wedge member to cause said wedge member to provide a certain angle of inclination, effective to provide a certain amount of self-energization.
- [c18] The method of Claim 16 wherein said step of providing an actuation force comprises the steps of providing a motor; and causing said motor to provide said actuation force.
- [c19] The method of Claim 16 wherein said step of sensing a desired amount of braking comprises the steps of providing a selectively movable braking member; and sensing an amount of movement of said selectively movable

braking member.

[c20] The method of Claim 17 further comprises the step of providing a biasing spring; and coupling said biasing spring to said pad member, effective to bias said pad member against said wedge member.